

Fig. 1: SEM micrograph of the α -Ti(Al,O)/Al₂O₃ composite produced by sintering the Al/TiO₂ composite powder at 1550°C for 1 hour. The dark particles are Al₂O₃.

FIGURE 1

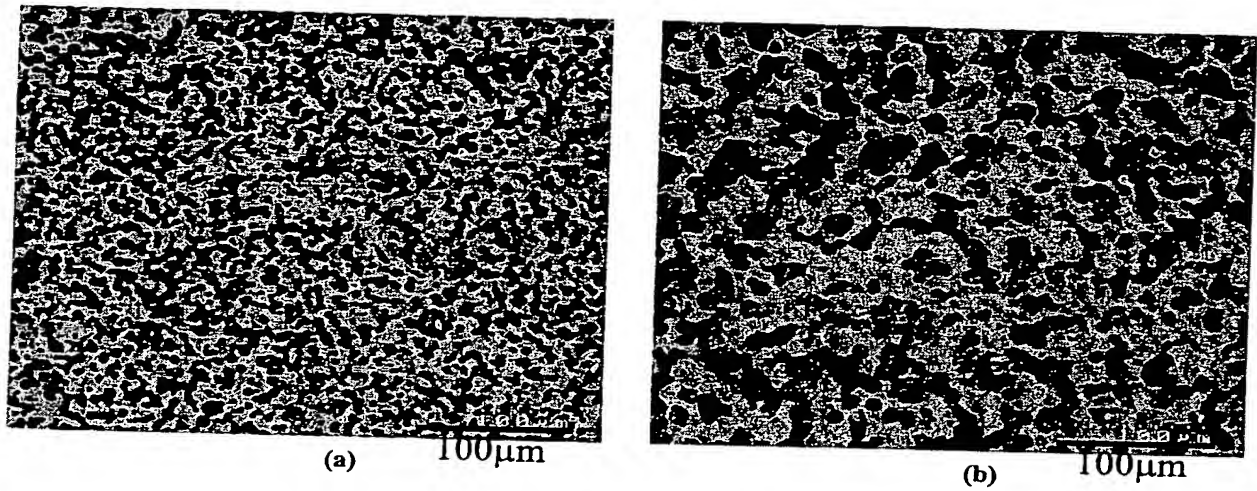


Fig. 2: SEM micrographs of the Ti₃Al/Al₂O₃ composite produced by pressureless sintering of the Al/TiO₂ composite powder at (a) 1550°C and (b) 1650°C for 1 hour respectively.

FIGURE 2

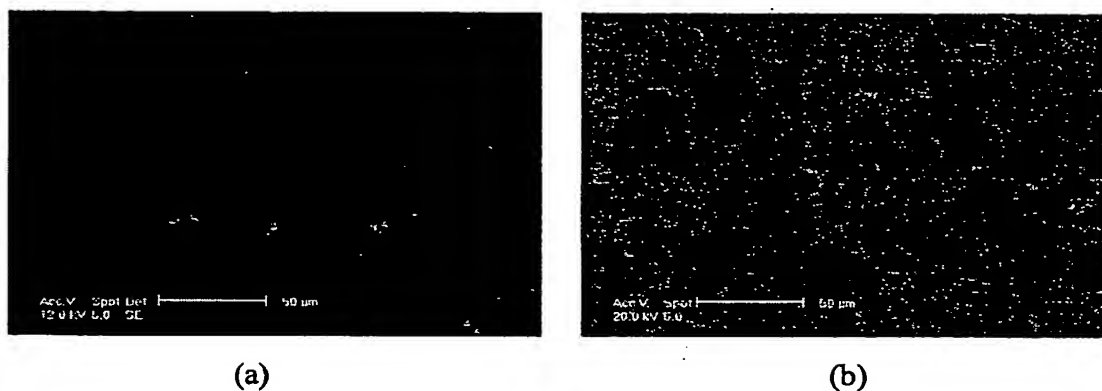


Fig. 3: SEM backscattered electron micrographs of Ti_3Al -10vol.%SiC samples produced by HIPping at 1000°C for 2 hours under 200 MPa: (a) 2 h milled and (b) 8 h milled.

FIGURE 3

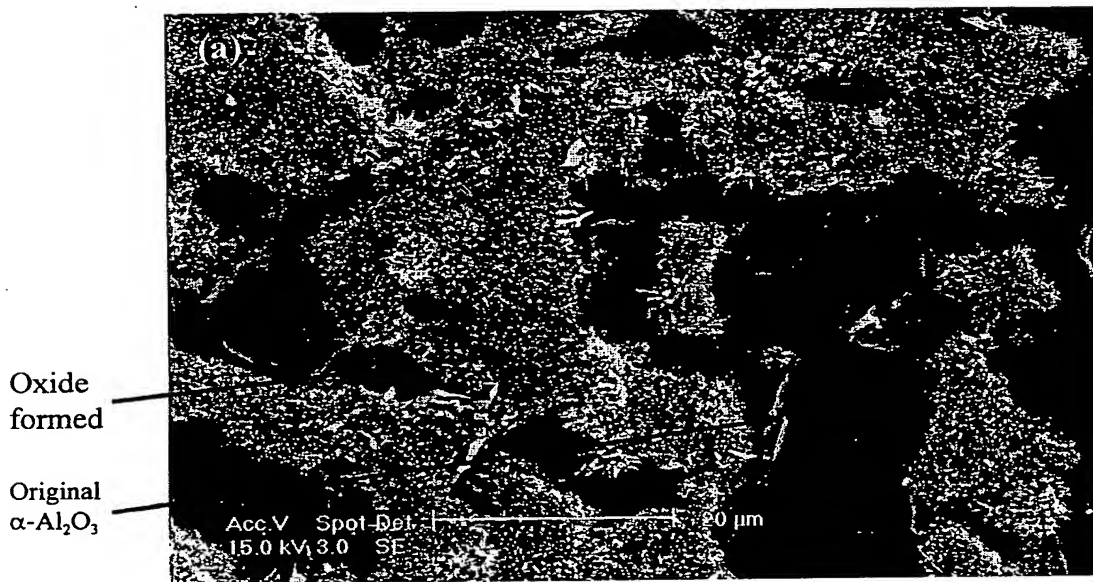


Fig. Surface and cross-section morphologies of $\text{Ti}(\text{Al},\text{O})/\text{Al}_2\text{O}_3$ composite after oxidation at 700°C isothermally for 100 hours: (a) surface morphology; (b) and (c) cross-section morphology.

FIGURE 4A

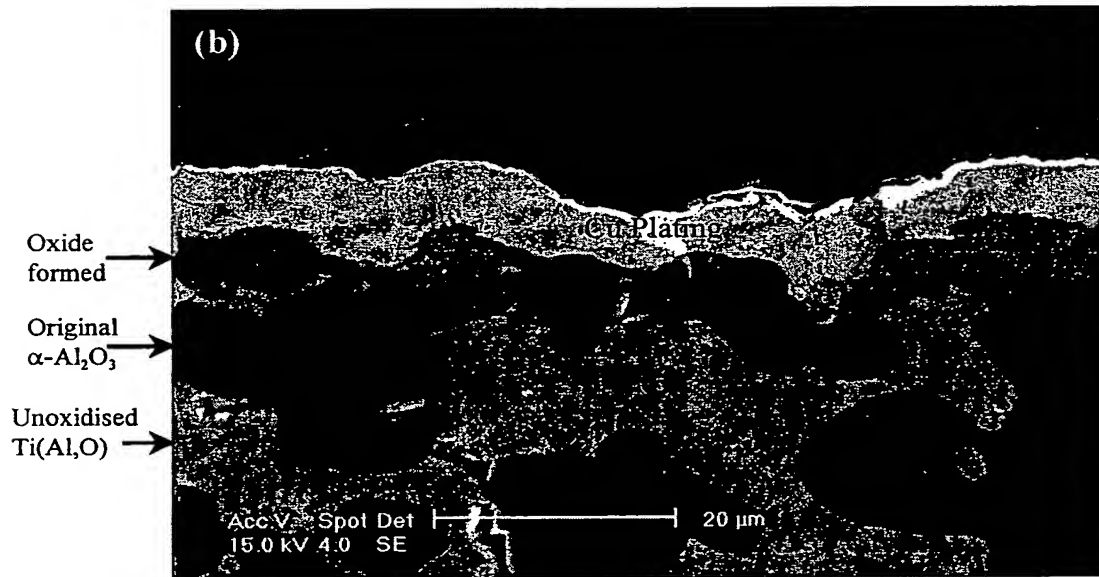
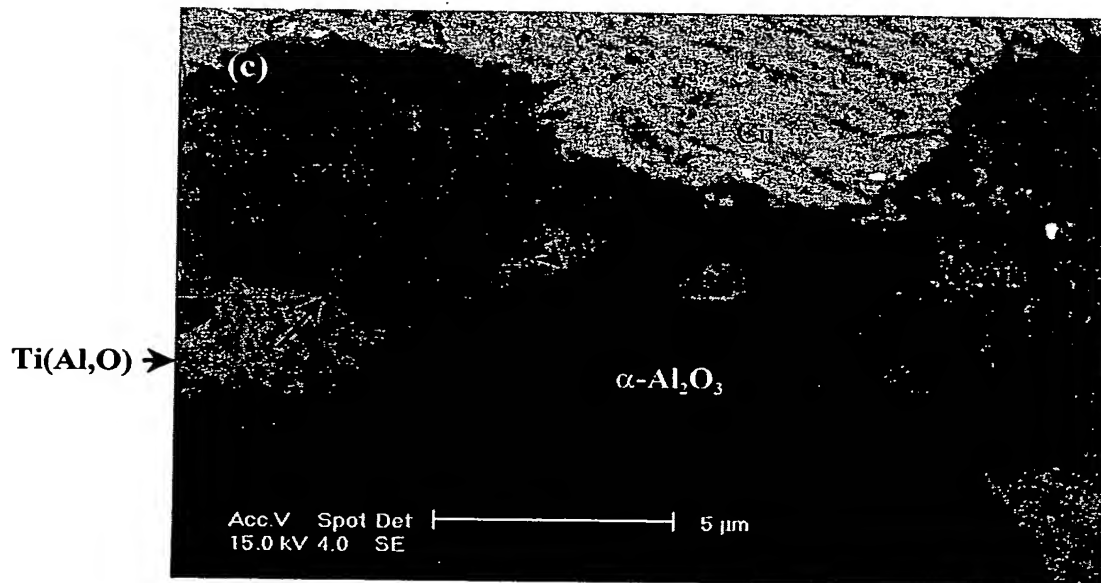


FIGURE 4B



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FIGURE 4C

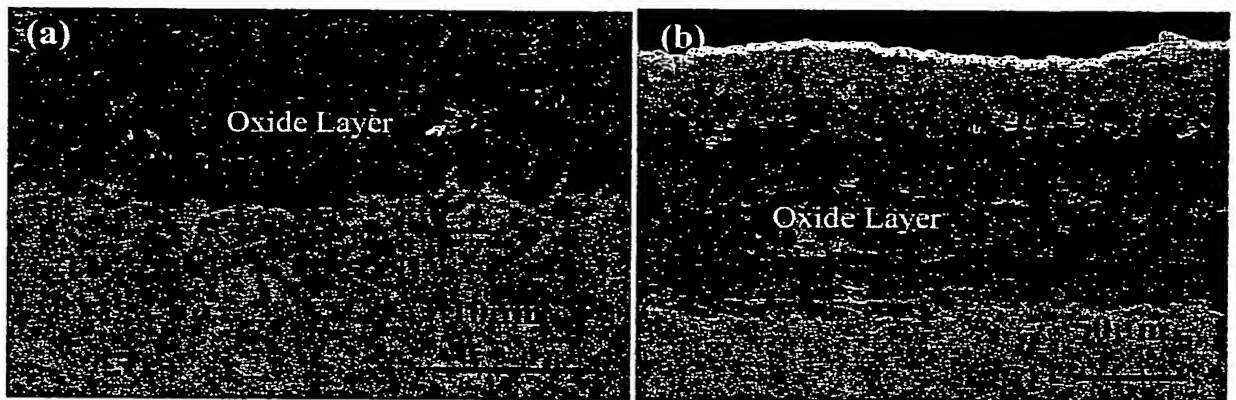
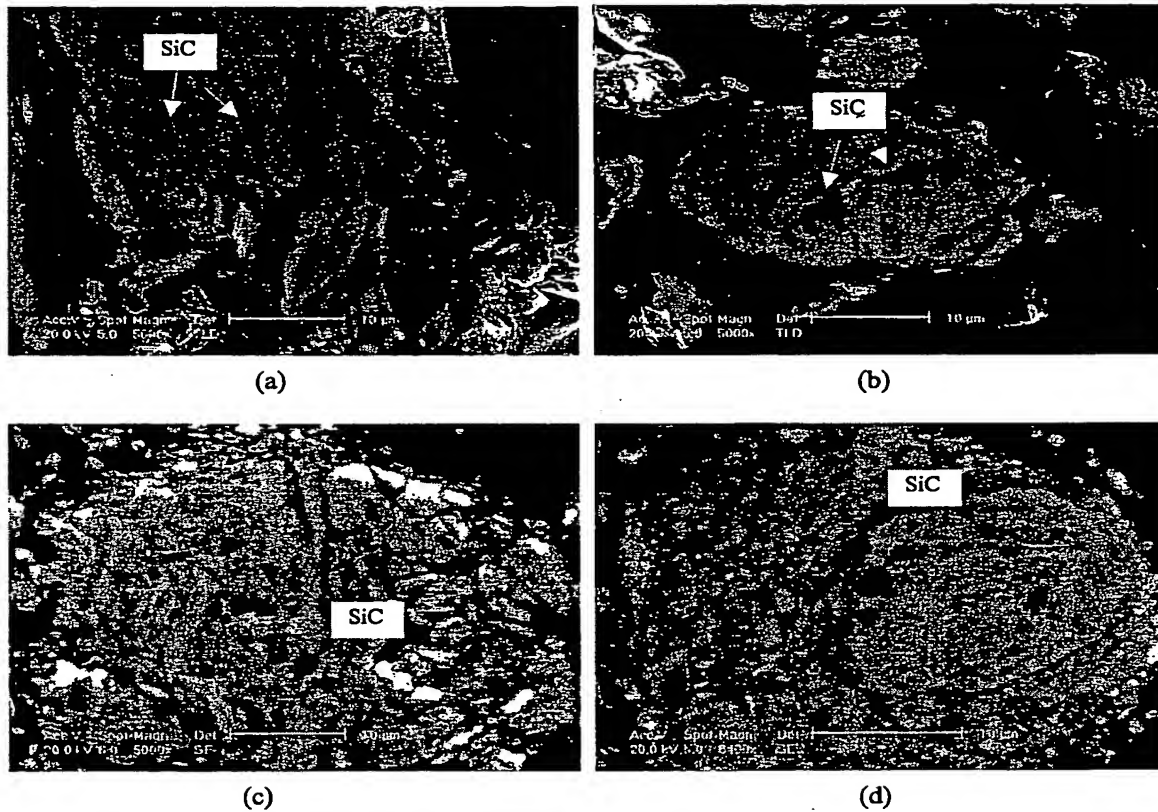


Fig. : Cross-section of $\text{Ti}_3\text{Al}/20\%\text{TiC}$ composite samples oxidised at 800°C in air for 200 hrs; (a) produced using 8hrs milled powder, and (b) produced using 16hrs milled powder.

FIGURE 5



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Fig : SEM micrographs of the Ti_3Al -10vol% SiC powder particles after different milling durations. (a) 2 hours; (b) 4 hours; (c) 8 hours; and (d) 16 hours.